

Cancer in Alberta

- In 2010, there were **15,232** new cancer cases diagnosed in Alberta and **5,526** Albertans died from the disease.
- Approximately **18,500** cases of cancer are expected to be diagnosed in 2015.
- Cancer accounted for **27%** of deaths in the province for all ages in 2010; the second leading cause of death in Alberta after deaths from circulatory system diseases (**31%**). It accounted for **37%** of deaths in the 35-64 age group which is more than circulatory system, respiratory system and digestive system diseases combined.
- In 2010, cancer was the second leading contributor, after injury, to potential years of life lost (PYLL) for men and women, representing **24%** of the PYLL resulting from all causes of death in Alberta.
- Approximately **1 in 2** Albertans will develop cancer in their lifetime and approximately **1 in 4** people born in Alberta will die from cancer.
- As of December 31, 2010, approximately **120,400** Albertans were alive who had previously been diagnosed with cancer.
- The most commonly diagnosed cancers in Alberta in 2010 were breast, prostate, colorectal and lung. These four cancers accounted for **53%** of new cancer cases and about half of cancer deaths.

Prostate Cancer

- Approximately **1 in 6** men will develop invasive prostate cancer within their lifetime.
- In 2010, **2,961** potential years of life were lost due to prostate cancer.

- As of December 31, 2010, approximately **22,350** Albertans were alive who had previously been diagnosed with prostate cancer.
- From 2001-2010*, prostate cancer **incidence rates have decreased**.
- From 1995 to 2010*, prostate cancer **mortality rates have decreased**.
- In 2010, there were **2,073** new cases of prostate cancer in Alberta and approximately **349** deaths due to the disease.
- Approximately **2,700** cases of prostate cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for prostate cancer in Alberta is approximately **96%** for those diagnosed between 2008 and 2010

Breast Cancer

- Approximately **1 in 8** women will develop invasive breast cancer within their lifetime.
- In 2010, **7,290** potential years of life were lost due to breast cancer.
- As of December 31, 2010, approximately **25,550** Albertans were alive who had previously been diagnosed with breast cancer.
- From 1990 to 2010*, female breast cancer **incidence rates have remained stable**.
- From 1990 to 2010*, female breast cancer **mortality rates have decreased**.
- In 2010, there were **2,264** new cases of breast cancer in Albertan women and **399** deaths due to the disease.
- Approximately **2,250** cases of breast cancer are expected to be diagnosed in women in 2015.
- The five-year relative survival ratio for breast cancer in Alberta is approximately **89%** for those diagnosed between 2008 and 2010.

* Year range represents the period over which the most recent significant trend was observed.

Lung Cancer

- Approximately **1 in 12** men and **1 in 14** women will develop invasive lung cancer within their lifetime.
- In 2010, **21,160** potential years of life were lost due to lung cancer.
- As of December 31, 2010, approximately **4,150** Albertans were alive who had previously been diagnosed with lung cancer.
- From 1990 to 2010*, **male** lung cancer **incidence rates have decreased** while **female** lung cancer **incidence rates increased** over the period 1993-2008*.
- From 1990 to 2010*, **male** lung cancer **mortality rates have decreased** while **female** lung cancer **mortality rates have increased** over the period 1990 to 2000*.
- In 2010, there were **1,839** new cases of lung cancer in Alberta and **1,445** deaths due to the disease.
- Approximately **1,670** cases of lung cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for lung cancer in Alberta is approximately **15%** for those diagnosed between 2008 and 2010.

Colorectal Cancer

- Approximately **1 in 13** men and **1 in 16** women will develop invasive colorectal cancer within their lifetime.
- In 2010, **9,957** potential years of life were lost due to colorectal cancer.
- As of December 31, 2010, approximately **13,450** Albertans were alive who had previously been diagnosed with colorectal cancer.
- From 1990 to 2000*, **male** colorectal cancer **incidence rates have increased** and then **decreased** between 2000 and 2010 while **female** rates **have increased** over the period 1990-2010*.

- From 1990 to 2010*, **male** colorectal cancer **mortality rates have decreased**. Similarly, **female** colorectal cancer **mortality rates have decreased** over the period 1990 to 2010*.
- In 2010, there were **1,902** new cases of colorectal cancer in Alberta and **695** deaths due to the disease.
- Approximately **2,350** cases of colorectal cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for colorectal cancer in Alberta is approximately **66%** for those diagnosed between 2008 and 2010.

Non-Hodgkin Lymphoma

- Approximately **1 in 39** men and **1 in 44** women will develop invasive non-Hodgkin lymphoma within their lifetime.
- In 2010, **2,623** potential years of life were lost due to non-Hodgkin lymphoma.
- As of December 31, 2010, approximately **5,150** Albertans were alive who had previously been diagnosed with non-Hodgkin lymphoma.
- From 1990 to 2010*, both **male and female** non-Hodgkin lymphoma **incidence rates have increased**.
- From 1990 to 2010*, both **male and female** non-Hodgkin lymphoma **mortality rates have remained stable**.
- In 2010, there were **644** new cases of non-Hodgkin lymphoma in Alberta and **195** deaths due to the disease.
- Approximately **860** cases of non-Hodgkin lymphoma are expected to be diagnosed in 2015.
- The five-year relative survival ratio for non-Hodgkin lymphoma in Alberta is approximately **71%** for those diagnosed between 2008 and 2010.

* Year range represents the period over which the most recent significant trend was observed.

Melanoma of the Skin

- Approximately **1 in 59** men and **1 in 73** women will develop invasive melanoma of the skin within their lifetime.
- In 2010, **1,331** potential years of life were lost due to melanoma of the skin.
- As of December 31, 2010, approximately **7,050** Albertans were alive who had previously been diagnosed with melanoma of the skin.
- From 1990 to 1995*, **male melanoma incidence rates increased**. Similarly, **female melanoma incidence rates increased** over the period 1990 to 1996*.
- From 1990 to 2010*, both **male and female melanoma mortality rates remained stable**.
- In 2010, there were **534** new cases of melanoma of the skin in Alberta and **73** deaths due to the disease.
- If current trends continue, approximately **320** male cases and **270** female cases of melanoma of the skin are expected to be diagnosed in 2015.
- The five-year relative survival for melanoma of the skin in Alberta is approximately **89%** for those diagnosed between 2008 and 2010.

Leukemia

- Approximately **1 in 46** men and **1 in 63** women will develop invasive leukemia within their lifetime.
- In 2010, **2,651** potential years of life were lost due to leukemia. As of December 31, 2010, approximately **4,150** Albertans were alive who had previously been diagnosed with leukemia.
- From 1990 to 2010*, **male and female incidence rates have remained stable**.

- From 2000 to 2010*, **male leukemia mortality rates have decreased** while **female leukemia mortality rates have remained stable** over the period 1990 to 2010*.
- In 2010, there were **509** new cases of leukemia in Alberta and **180** deaths due to the disease.
- Approximately **630** cases of leukemia are expected to be diagnosed in 2015.
- The five-year relative survival ratio for leukemia in Alberta is approximately **70%** for those diagnosed between 2008 and 2010.

Kidney Cancer

- Approximately **1 in 54** men and **1 in 84** women will develop invasive kidney cancer within their lifetime.
- In 2010, **1,814** potential years of life were lost due to kidney cancer.
- As of December 31, 2010, approximately **3,900** Albertans were alive who had previously been diagnosed with kidney cancer.
- From 1990 to 2010*, **both male and female kidney cancer incidence rates have remained stable**.
- From 1990 to 2010*, **male kidney cancer mortality rates have decreased** while **female kidney cancer mortality rates have remained stable**.
- In 2010, there were **428** new cases of kidney cancer in Alberta and **122** deaths due to the disease.
- Approximately **600** cases of kidney cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for kidney cancer in Alberta is approximately **67%** for those diagnosed between 2008 and 2010.

* Year range represents the period over which the most recent significant trend was observed.

Pancreatic Cancer

- Approximately **1 in 66** men and **1 in 62** women will develop invasive pancreatic cancer within their lifetime.
- In 2010, **4,261** potential years of life were lost due to pancreatic cancer.
- As of December 31, 2010, **390** Albertans were alive who had previously been diagnosed with pancreatic cancer.
- From 1990 to 2010*, **male** pancreatic cancer **incidence rates have decreased** while **female** pancreatic cancer **incidence rates decreased** over the period 2005-2010*.
- From 1990 to 2010*, **male** pancreatic cancer **mortality rates have decreased** while **female** pancreatic cancer **mortality rates have also decreased** over the period 2004 to 2010.
- In 2010, there were **334** new cases of pancreatic cancer in Alberta and **295** deaths due to the disease.
- Approximately **470** cases of pancreatic cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for pancreatic cancer in Alberta is approximately **7%** for those diagnosed between 2008 and 2010.

Cervical Cancer

- Approximately **1 in 123** women will develop cervical cancer within their lifetime.
- In 2010, **834** potential years of life were lost due to cervical cancer.
- As of December 31, 2010, approximately **3,200** Albertans were living with cervical cancer.
- From 1990 to 2010*, cervical cancer **incidence rates have decreased**.

- From 1990 to 2010*, cervical cancer **mortality rates have decreased**.
- In 2010, there were **150** new cases of cervical cancer in Alberta and **33** deaths due to the disease.
- Approximately **180** cases of cervical cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for cervical cancer in Alberta is approximately **81%** for those diagnosed between 2008 and 2010.

Brain Cancer

- Approximately **1 in 121** men and **1 in 179** women will develop invasive brain cancer within their lifetime.
- In 2010, **4,462** potential years of life were lost due to brain cancer.
- As of December 31, 2010, approximately **1,150** Albertans were alive who had previously been diagnosed with brain cancer.
- From 1990 to 2010*, both **male and female** brain cancer **incidence rates have remained stable**.
- From 1990 to 2010*, both **male and female** brain cancer **mortality rates have remained stable**.
- In 2010, there were **188** new cases of brain cancer in Alberta and **178** deaths due to the disease.
- Approximately **280** cases of brain cancer are expected to be diagnosed in 2015.
- The five-year relative survival ratio for brain cancer in Alberta is approximately **28%** for those diagnosed between 2008 and 2010.

*Year range represents the period over which the most recent significant trend was observed.

Male Liver Cancer

- Approximately **1 in 126** men will develop invasive liver cancer within their lifetime.
- In 2010, **1,290** potential years of life were lost due to male liver cancer.
- As of December 31, 2010, approximately **400** male Albertans were alive who had previously been diagnosed with liver cancer.
- From 1990 to 2005*, **male liver cancer incidence rates have increased.**
- From 1990 to 2010*, **male liver cancer mortality rates have increased.**
- In 2010, there were **117** new cases of male liver cancer in Alberta and **72** deaths in males due to the disease.
- Approximately **180** cases of liver cancer are expected to be diagnosed in males in 2015.
- The five-year relative survival ratio for male liver cancer in Alberta is approximately **20%** for those diagnosed between 2008 and 2010.

Childhood Cancer

- In 2010, **103** children aged 0 to 14 years old were diagnosed with cancer in Alberta.
- Between 2006 and 2010, the most common childhood cancers were **leukemias (31%) central nervous system tumors (20%), lymphomas (12%), neuroblastomas (7%), and renal tumors (7%).**
- In 2010, **14** children aged 0 to 14 years old died from childhood cancer in Alberta.
- Between 2006 and 2010, the most common cancer causes of death in children were **central nervous system tumors (37%), leukemias (31%), and neuroblastomas (8%).**

- As of December 31, 2010, approximately 680 children aged 0 to 14 years were alive who had previously been diagnosed with cancer in Alberta and about 2400 Albertans aged 0 to 99 were survivors of childhood cancer.
- Since 1990, childhood cancer **incidence rates have increased** for children aged 0 to 14 years old.
- Since 1990, childhood cancer **mortality rates have been stable** for children aged 0 to 14 years old.
- Five-year observed survival rate for all childhood cancers diagnosed between 2001 and 2005 in Alberta is **83%.**

*Year range represents the period over which the most recent significant trend was observed.

Further Information

Further information is available on a separate document, the [Appendix](#):

- Appendix 1: Glossary
- Appendix 2: Cancer Definitions
- Appendix 3: Data Notes

Contact Information

If further information is required, please contact
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Purpose of the Report

Cancer Surveillance is a specialized team within Alberta Health Services, Cancer Care, that actively contributes to Alberta Health Service's goal of creating the best-performing publicly funded health system in Canada. This is accomplished by conducting cancer **surveillance** through the collection, integration, analysis and dissemination of cancer related data and information.

The report is designed to provide comprehensive and detailed information regarding cancer in Alberta. It will help support health professionals, researchers and policy makers in the planning, monitoring and evaluation of cancer-related health programs and initiatives. It will also be a useful education tool for the general public and media.

Navigating the Report

This document provides a summary of the Report on Cancer Statistics in Alberta. Details about other individual cancer types are available within separate documents. The words highlighted in **dark blue** are terms described in detail in the Glossary within the [Appendix](#) document.

Data Notes

In this document, the term “cancer” refers to **invasive cancers** unless otherwise specified. It is important to note that this document contains both actual and estimated data; distinctions are made where applicable. The numbers published in this report should be considered provisional, as a few cases and deaths may be registered in subsequent years. The data in this report reflect the state of the Alberta Cancer Registry as of July 31, 2012.

Incidence **rates** presented in this document exclude basal and squamous skin cancer cases. Although approximately 30% of the **malignant** cancers diagnosed among Albertans each year are basal and squamous skin cancers, these **tumours** are generally not life-threatening and are inconsistently reported and coded across registries; therefore basal and squamous skin cancers are rarely included in cancer registry reports.

For detailed descriptions about data sources and how they affect data presented in this report, please see the [Appendix](#) document.

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